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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,229	04/07/2005	Manfred Kloft	P/4325-7	9970
2352	7590	04/10/2006	EXAMINER	
OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403			TRIEU, THAI BA	
			ART UNIT	PAPER NUMBER
			3748	
DATE MAILED: 04/10/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

6

Office Action Summary	Application No. 10/527,229	Applicant(s) KLOFT ET AL.	
	Examiner Thai-Ba Trieu	Art Unit 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2005.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3 and 4 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 3 and 4 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03/10/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Preliminary Amendment filed on March 10, 2005 is acknowledged. Claims 1-2 were cancelled; and claims 3-4 were newly added.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Applicant is required to furnish a drawing under 37 CFR 1.81(c). No new matter may be introduced in the required drawing. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically,

- In claim 3, lines 7-8, the recitation of ***“selectively closing exclusively the air channel that bypasses the compressor in a continuously variable manner”*** renders the claim indefinite, since it is not clear that which continuously variable manner(s) applicants want to claim in the claim. Applicants are required to clarify and define the continuously variable manner(s) as the air channel is to be closed.

- In claim 3, lines 8 and 12-13, the recitation of ***“compression of the compressor”*** renders the claim indefinite, since it is not clear that applicants want to reference compression to which limitations such as air intake flow rate, air intake pressure, or the air intake velocity/speed of the flow. Applicants are required to clarify the term compression.

- In claim 3 lines 9-12, the twice recitation of ***“in an engine load or speed range in which the exhaust gas turbocharger alone is not able to apply a desired boost pressure”*** renders the claim indefinite, since it is not clear that which engine load (i.e. no load, or partial load, or full load) or speed range (i.e. idle speed, or low speed, or high speed) that applicants want to define in order that the turbocharger does not provide a desired boost pressure. Applicants are required to clarify the engine load and the speed range.

Do the applicants want to claim under the same condition ***“in an engine load or speed range in which the exhaust gas turbocharger alone is not able to apply a desired boost pressure”***, the two method steps of switching on the compressor and controlling the compression of the compressor happen at the same time, or one step goes after another steps? Applicants are required to revise the claim.

Art Unit: 3748

- In claim 3, line 13-14, the recitation of “**compression of the exhaust gas turbocharger**” renders the claim indefinite, since it is not clear that applicants want to reference compression to which limitations such as exhaust gas flow rate, exhaust gas pressure, or the exhaust gas velocity/speed of the flow. Applicants are required to clarify the term compression.

- In claim 4, lines 1-3, the recitations of “as soon as” and “being able to deliver” render the claim indefinite, since it is not clear that how soon the mass flow exceeds a delivery volume to the compressor, and under which condition the exhaust gas turbocharger can be delivered the exhaust mass flow, and under which condition the exhaust gas turbocharger cannot be delivered the exhaust mass flow. Applicants are required to identify each condition.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 3-4 are rejected under 35 U.S.C. 102(b) as best understood as being anticipated by the admitted prior art of Shibata (Patent Number 4,903,488).

Art Unit: 3748

Shibata discloses a method for operating an internal combustion engine (30) having:

a charge air-flow path (10b) in which a compressor (10),

an exhaust gas turbocharger (20),

a waste gate (50) which admits a flow of exhaust gas to a turbine (22) of the exhaust gas turbocharger (20), and

a throttle valve (32) are installed, wherein an outlet (10a) of the compressor is connected with an inlet (Not Numbered) of the exhaust gas turbocharger (20), an air channel (13) that bypasses the compressor (10) is provided, and the throttle valve (32) is installed downstream of the exhaust gas turbocharger (20), the method comprising the steps of:

selectively closing exclusively the air channel (13) that bypasses the compressor (10) in a continuously variable manner and controlling compression of the compressor (10) with a compression throttle valve (40) which is installed in the air channel that bypasses the compressor;

switching on the compressor (10), in an engine load or speed range in which the exhaust gas turbocharger alone is not able to apply a desired boost pressure; and in the engine load or speed range in which the exhaust gas turbocharger alone is not able to apply the desired boost pressure, controlling the compression of the compressor (10) with the compression throttle valve (40), and

adjusting the waste gate (50) to maximum compression of the exhaust gas turbocharger;

shutting off the compressor as soon as the mass flow that the exhaust gas turbocharger is able to deliver based on exhaust gas mass flow m_{abg} supplied by the engine exceeds a delivery volume of the compressor (See Figure 1, Column 2, lines 6-68, Column 3, lines 1-5, Column 5, lines 5-31).

Claim 3 is rejected under 35 U.S.C. 102(e) as best understood as being anticipated by the admitted prior art of Ellmer et al. (Patent Number US 6,637,204 B2 or FR 2818310 A1).

Ellmer discloses a method for operating an internal combustion engine (1) having:

a charge air-flow path (3) in which a compressor (14),

an exhaust gas turbocharger (7, 8, 9),

a waste gate (12) which admits a flow of exhaust gas to a turbine (7) of the exhaust gas turbocharger (7, 8, 9), and

a throttle valve (18) are installed, wherein an outlet (14) of the compressor is connected with an inlet (Not Numbered) of the exhaust gas turbocharger (7, 8, 9), an air channel (17) that bypasses the compressor (14) is provided, and the throttle valve (18) is installed downstream of the exhaust gas turbocharger (7, 8, 9), the method comprising the steps of:

selectively closing exclusively the air channel (17) that bypasses the compressor (14) in a continuously variable manner and controlling compression of the compressor (14) with a compression throttle valve (18) which is installed in the air channel (17) that bypasses the compressor (14);

switching on the compressor (14), in an engine load or speed range in which the exhaust gas turbocharger alone is not able to apply a desired boost pressure; and in the engine load or speed range in which the exhaust gas turbocharger alone is not able to apply the desired boost pressure, controlling the compression of the compressor (14) with the compression throttle valve (18), and

adjusting the waste gate (12) to maximum compression of the exhaust gas turbocharger (7, 8, 9) (See Figures 1 and 3; Column 4, lines 30-67, Column 5, lines 1-42).

Conclusion

The IDS (PTO-1449) filed on March 10, 2005 has been considered. An initialized copy is attached hereto.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Ellmer et al. (US Patent Number 6,922,996 B2) disclose a method for controlling an electrically driven compressor.


- Kanesaka (US Patent Number 6,343,473 B1) discloses a hybrid-supercharged engine.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (571) 272-4867. The examiner can normally be reached on Monday - Thursday (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTB
March 28, 2006


Thai-Ba Trieu
Primary Examiner
Art Unit 3748